



Third meeting of the BIEE-ROSE Project on Energy Efficiency
and SDG7 monitoring in Latin America and the Caribbean
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SDG 7 indicators in LACs: data collection and dissemination

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Status of data collection

Objective: updating and expansion of the BIEE data base

- A data base is useful for policy makers only if it is **regularly updated** → the first objective of this task was to provide data and indicators up to **2018**.
- As the scope of the project is not only to monitor energy efficiency, but also the three dimensions of SDG7/OSD7, the previous BIEE indicators have been extended to include energy access and renewables → the list of indicators developed is available in Annex

Data collection strategy

- As countries had different previous experiences with the BIEE project and to alleviate the work for national teams, the updating has been organized as follows.
- **For countries** that participated in the previous phases of the BIEE project and **have continued to update the BIEE database**: Argentina, Brazil, Mexico, Uruguay, (Republic Dominican, Guyana*) → all data directly collected from **national sources** by **national teams**.
- **For all the other countries**:
 - **Aggregate data** collected from **OLADE** and **CEPALSTAT** by **Enerdata**;
 - **Separate data** collection for **more disaggregated data** necessary for the calculation of advanced energy efficiency indicators.

**For Republic Dominican and Guyana, the update is still in progress*

Collection process of more detailed data

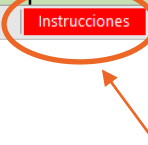
- For detailed data that are only available from national sources → we asked national teams to collect such data in a **new simplified template**.
- Such data include data on equipment and consumption by **end-use** for households, by **mode and vehicle type** in transport, or **by branch** in industry.
- The new template has been pre-filled by Enerdata with previous data and **should be updated until 2018** (or the last year available)
- We also asked national teams to **provide studies or surveys concerning transport and/or households** sectors, so that Enerdata can try to **estimate energy consumption split by end-use for households and by type of vehicle in transport** if enough information is available

New template on detailed data

Data to be collected organized by sector: transport, households, services, industry

Series code	English title	Título en español	Country code	Unit	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Source
Transport																
Consumption by mode																
Rail																
tocffer	Total rail transport consumption	Total de consumo ferroviario		ktoe	39	40	40	49								
Water																
tocfmar	Total domestic water transport consumption	Total de consumo de transporte acuativo domestico		ktoe	656	669	672	836								BEN, 2012
Domestic air																
carcfado	Jet fuels consumption in domestic air transport (incl aviation g	Consumo total de combustible en transporte aereo domestico		ktoe	710	737	852	920								BEN, 2012
Road consumption by type of vehicle																
Cars																
esscfvpc	Gasoline consumption of cars	Consumo de gasolina en autos		ktoe												
gzlcfvpc	Diesel consumption of cars	Consumo de diésel en autos														
Light duty vehicles																
esscfvlr	Gasoline consumption of light vehicles	Consumo de gasolina en vehículos industriales ligeros														
gzlcfvlr	Diesel consumption of light vehicles	Consumo de diésel en vehículos industriales ligeros														
Trucks																
gzlcfcam	Diesel consumption of trucks	Consumo de diésel en camiones														
Buses																
esscfbus	Gasoline consumption of buses	Consumo de gasolina de buses														
gzlcfvpc	Diesel consumption of buses	Consumo de diésel en buses		ktoe												
Motorcycles																
esscfmot	Gasoline consumption of two-wheels	Consumo de gasolina en motos		ktoe												
Vehicle stock by type																
Stock de vehículos por tipo																
nbrvpc	Stock of cars	Stock de autos		k	2121	2249	2365	2562								
nbrvpcss	Stock of motor spirit cars	Stock de autos a gasolina		k	1788	1896	1995	2160								Cálculos propios
nbrvpczli	Stock of diesel oil cars	Stock de autos a diesel		k	226	240	250	272								Cálculos propios
nbrmot	Stock of motorcycles	Stock de motocicletas		k	2587	2909	3201	3600								RUNT, 2012
nbrvrl	Stock of light vehicles	Stock de vehículos ligeros		k	433	456	475	504								RUNT, 2012
nbrvrlss	Stock of motor spirit light vehicles	Stock de vehículos ligeros a gasolina		k	251	264	275	292								Cálculos propios
nbrvrlzli	Stock of diesel oil light vehicles	Stock de vehículos ligeros a diesel		k	158	166	173	183								Cálculos propios
nbrcam	Stock of trucks	Stock de camiones		k	246	256	261	273								RUNT, 2012
nbrcamss	Stock of motor spirit trucks	Stock de camiones a gasolina		k	60	62	64	66								Cálculos propios
nbrcamzli	Stock of diesel oil trucks	Stock de camiones a diesel		k	171	177	181	189								Cálculos propios
nbrbus	Stock of buses	Stock de buses		k	167	173	178	183								RUNT, 2012

In green: data to be collected in priority
In red: data to be collected if available



Guidelines are given in the first sheet

Status of data collection – as of mid June 2021

Country	All data updated by National team	Macro data updated by Enerdata	Detailed data updated by national team
Argentina	X		
Bolivia		X	No focal point
Brasil	X		
Chile		X	Work in progress
Colombia		X	Waiting for answer
Costa Rica		X	X
Ecuador		X	Work in progress
El Salvador		X	Work in progress
Guyana	Work in progress		
Mexico	X		
Nicaragua		X	No focal point
Panama		X	X
Paraguay		X	
Peru		X	No focal point
Rep. Dominicana	Work in progress		
Uruguay	X		

Data mapper

<https://biece-cepal.enerdata.net/datamapper/>

BIEE data mapper: main features

- The BIEE data mapper gives access to a **selection** of indicators showing **both** the **range** of values by country on a **map** and a **ranking** of countries (bar charts).
- Both **levels** and **trends** are available.
- **Open** access
- **Key messages** and a short **analysis** is available for each indicator in **English** and **Spanish**
- Possibility to access to some additional indicators to **explain the trends** observed ("**Analysis**")

BIEE data mapper: main features

Language selection

Base de Información de Eficiencia Energética ES / EN

DATA MAPPER | POLICY & MEASURES

Global indicators ▾
Primary intensity
At exchange rate
At purchasing power parities
Final energy intensity
At exchange rate
At purchasing power parities
Ratio final/primary intensity
Renewables
% in TPES
% in gross electricity consumption
% in final energy consumption
Power sector ▾
Industry ▾
Transport ▾
Households ▾
Services ▾
Agriculture ▾

Primary energy intensity at exchange rate

2018 2010-2018

Map Excel

Unit: koe/\$10

- Below 0.15
- 0.15 to 0.2
- Above 0.2

Primary energy intensities in \$ at exchange rates vary significantly among countries

Country	Primary intensity (koe/\$10)
Panama	0.10
Uruguay	0.10
Brazil	0.10
Costa Rica	0.10
Colombia	0.11
Peru	0.12
Chile	0.14
El Salvador	0.15
Mexico	0.17
Ecuador	0.18
Argentina	0.19
Paraguay	0.23
Nicaragua	0.29
Bolivia	0.31

Analysis

Documentation

Short analysis

Level or trend

Export of data or map

Additional indicators and analysis

BIEE data mapper: enhancements


- The data mapper has been **completely re-designed** → more powerful technology, more user-friendly and more attractive
- The **documentation** of sources and **glossary** has been added in the website

... measures the total amount of energy
only be compared at purchasing power
fical


[Download the PDF >](#)

[Send us your questions >](#)

Documentation



**Documentation of BIEE data base
on SDG7 indicators
for Latin American & Caribbean countries**
March 2021



A. Sources
Sources of data:

Country	Source
Argentina	Data prepared by partner in Argentina (SE, ADEFA...)
Bolivia	OLADE, CEPALSTA
Brasil	Data prepared by sectors, except d
Chile	OLADE, CEPALSTA using clean cook
Colombia	OLADE, CEPALSTA
Costa Rica	OLADE, CEPALSTA (vehicles)
Ecuador	OLADE, CEPALSTA using clean cook
El Salvador	OLADE, CEPALSTA
Guyana	(work in progress)
Mexico	Data prepared by from data from v (CRE, ENIGH, CFE...)
Nicaragua	OLADE, CEPALSTA
Panama	OLADE, CEPALSTA cooking technol
Paraguay	OLADE, CEPALSTA
Peru	OLADE, CEPALSTA
Republica Dominicana	(work in progress)
Uruguay	Data prepared by (Ministerio de Inc in Uruguay)

The horizontal sources are used

- OLADE for energy supply, consumption by sector
- CEPALSTAT for macro-economic data, population, number of households, electrification rate and share of households by main cooking fuel
- World Bank for exchange rates
- IEA for data on solar water heaters

Documentation of BEE data base on SDG7 indicators – March 2021

Documentation of BEE data base on SDG7 indicators – March 2021

BIEE data mapper: enhancements

- **New indicators** on **renewables** (SDG 7.1) and **energy access** (SDG 7.2) have been added in the data mapper
- Users have **2 different entries** to consult the data mapper :
 - By **sector**: overall, power, industry, transport, households, services, agriculture
 - By **SDG 7 topic**: energy efficiency, renewables, energy access

Sector	Topic
Global indicators	▼
Power sector	▼
Industry	▼
Transport	▼
Households	▼
Services	▼
Agriculture	▼

Sector	Topic
Energy efficiency overview	▼
Energy efficiency by sector	▼
Renewables	▼
Energy access	▼

BIEE data mapper: enhancements

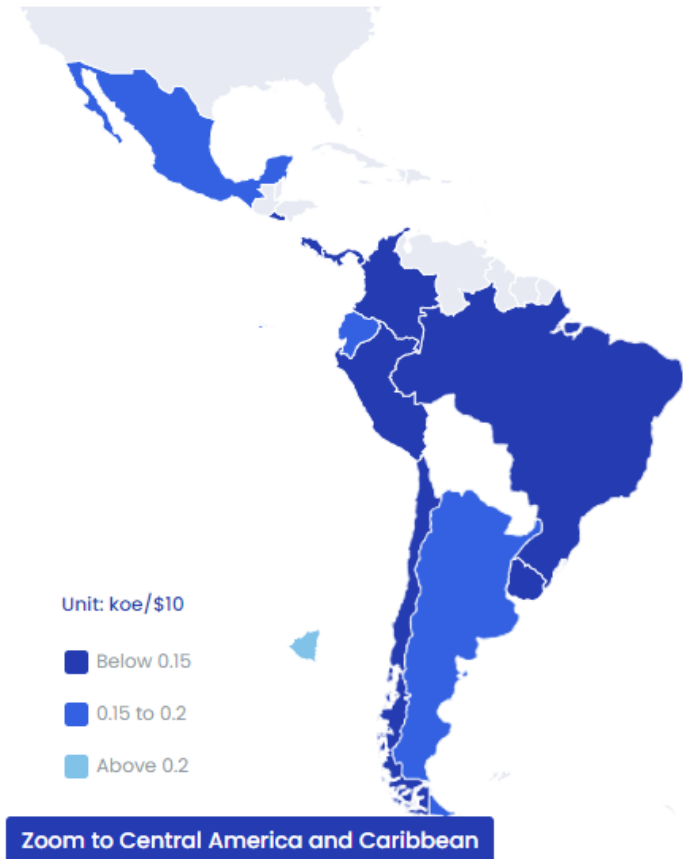
- Data mappers of Latin America and Caribbean have been merged in one data mapper

→ Possibility to **zoom on Central America and Caribbean** countries in the map

Primary energy intensity at exchange rate

[2018](#) [2010-2018](#)

[Map](#) [Excel](#)



Online demonstration

<https://biecepal.enerdata.net/datamapper>

Annex: SDG 7 indicators by topic

Indicators calculated for energy access (7.1)

% of households with access to clean cooking technologies

% of clean fuels in households consumption

% of households with access to electricity

Indicators calculated for renewables (7.2)

Four types of indicators were proposed

Share of renewables in TPES (in oferta total)

Share of renewables in power*

Share of renewables in final energy consumption**

Share of renewables by end-use sector*

* See Annex for more details

***Indicator implicitly proposed for monitoring OSD 7.2; indicator also used in Europe to set targets on renewables.*

Indicators calculated to monitor the energy efficiency dimension (7.3)

Primary energy intensity at purchasing power parities

Final energy intensity at purchasing power parities

Efficiency of power generation

Efficiency of thermal power plants

Rate of electricity T&D losses

Energy intensity of industry at purchasing power parities

Energy intensity of transport to GDP at purchasing power parities

Unit consumption of road transport per vehicle

Energy consumption of households per household

Electricity consumption per electrified households

Energy intensity of services at purchasing power parities

Electricity intensity of services at purchasing power parities

Electricity consumption for public lighting per capita

Energy intensity of agriculture at purchasing power parities